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NOTES ON GEOGRAPHIC DISTRIBUTION

Pisces, Syngnathidae, *Hippocampus reidi*: Filling distribution gaps.

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The slender seahorse, *Hippocampus reidi* Ginsburg, 1933 is one of the most exported Brazilian marine ornamental fish species (Monteiro-Neto et al. 2003). Besides the important value in the aquarium fishes trade, *H. reidi* is collected for folk medicine, souvenirs, religious purposes (Rosa et al. 2002; Rosa et al. 2005) and it is also frequently brought up by nonselective fishing gear such as trawl nets (Foster and Vincent 2004). The high exploitation rate of slender seahorses associated with degradation of their inshore habitats (Vincent 1996) characterizes them as a threatened species (Appendix II of CITES 2004). In the states of São Paulo and Rio de Janeiro (Southeast Brazil) this species is considered a threatened species; however, population status has not been evaluated in the other states (Rosa et al. 2005).

Despite its flourishing trade and concern about its conservation status (CITES 2004; Gasparini et al. 2005) no appropriate data on biology, ecology, habitat, abundance and distribution are available for this species (Data Deficient: IUCN 2006).

Hippocampus reidi is typically found at 0.1–75 m depth, associated with mangrove roots, seagrass, macroalgae, oysters, cnidarians, sponges, tunicates, and artificial structures in estuaries, gorgonian coral and some on stone corals (Vari 1982; Rosa et al. 2002; Foster and Vicent 2004; Rosa et al. 2005).

The distribution of *H. reidi* extends along the western Atlantic Ocean, from North Carolina (USA) to Rio Grande do Sul (Brazil), including Gulf of Mexico and Carribean Sea (Lourie et al. 1999; Carpenter 2002). However, records from national and international museum collections available in FishBase (Froese and Pauly 2006), NEODAT II (2006) and GBIF Biodiversity Data Index, show that the geographic distribution of this species has an evident known gap of around 2.300 km between the northern Brazilian coast and Guyana (Figure 1A). In these coastal region only two previous unusual oceanic records of *H. reidi* (Museum of Comparative Zoology - Harvard University: FISH59348, FISH59350) are recorded at more than 250 km offshore. The paucity of fish fauna surveys and the high turbidity preventing SCUBA observations may explain the lack of report of *H. reidi* for this region.

Rosa et al. (2005) studying the knowledge held by Brazilian fishers on the biology and ecology of the slender seahorse, recorded through interviews that seahorses are caught in Pará State (North Brazil) as a bycatch in commercial shrimp, food-fish or lobster nets. However, so far this species was never caught in fish fauna surveys in estuaries of north Brazilian coast (Barthem 1985; Martins-Juras et al. 1987; Batista and Rego 1996; Isaac et al. 1998; Camargo and Isaac 2001; Castro 2001; Krumme et al. 2004; Barletta et al. 2005; Goch et al. 2005; Giarrizzo and Krumme 2007).

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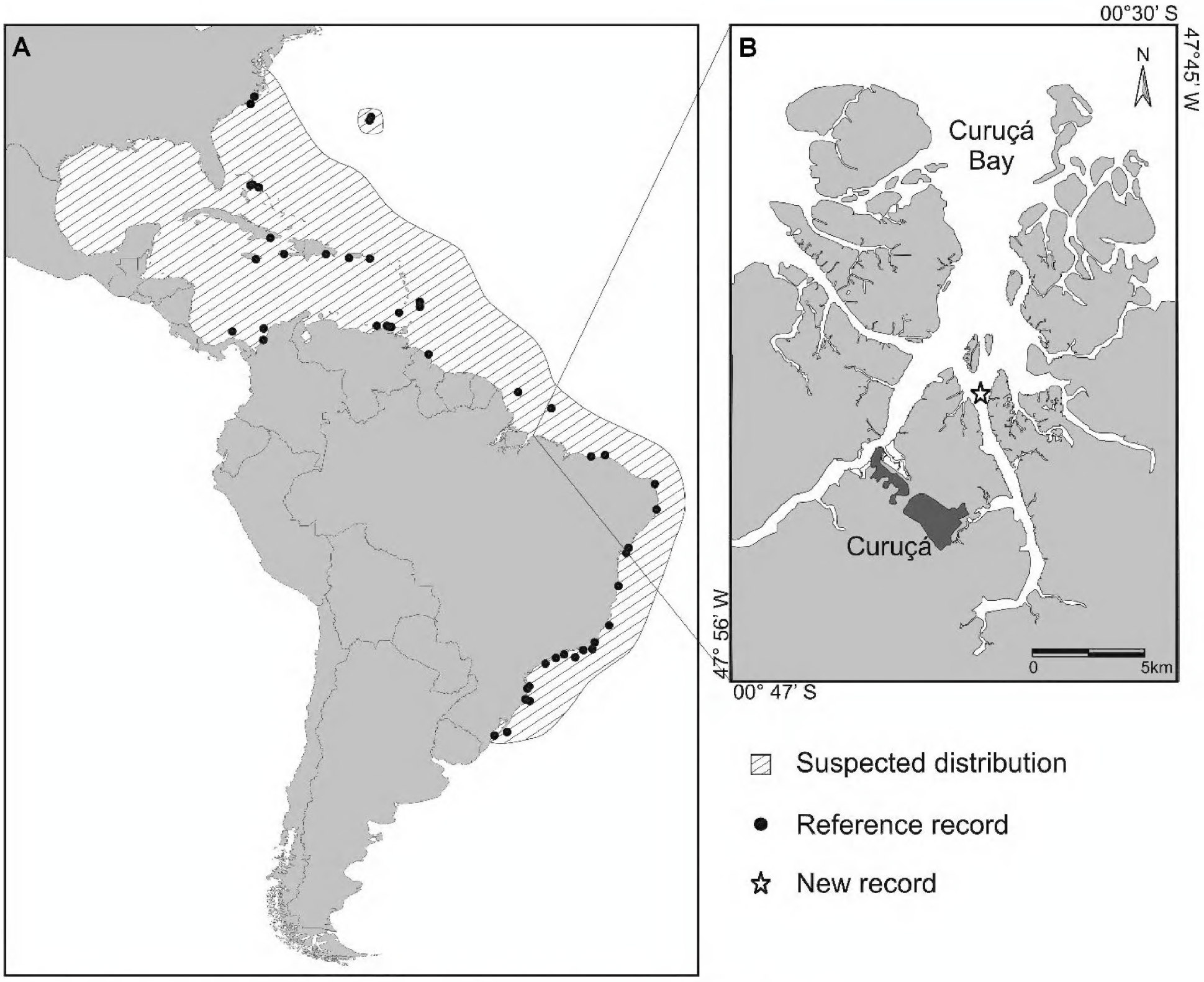

Figure 1. Geographical distribution of slender seahorse**,** *Hippocampus reidi*.

This paper reports the first record of *H. reidi* from an Amazonian estuary**.** The fish (Figure 2) was captured in the main channel of estuary of Curuçá River (0º40'24" S, 47º50'52" W) (Figure 1B), Pará, North Brazil, located at the eastern tip of the mouth of the southern channel of the Amazon delta (Marajó Bay). The specimen was caught on 08 July 2004, at ebb tide (around 17:00 h) using an otter trawl (8.62 m width and 13 mm stretched mesh size) at 4 m depth at low tide on a muddy bottom. The environmental parameters recorded at the moment of sampling event were: pH 7.7, dissolved oxygen concentration 6.74 mg/l, conductivity 35.0 µS/cm, water temperature 27.8 ºC; salinity 22.1 and seston 34.87 mg/l.

The specimen was preserved in alcohol and deposited in the Ichthyological Collection of the Museu Paraense Emilio Goeldi (Belém, Pará, Brazil), under the access number MPEG 11244. Identification followed Figueiredo and Menezes (1980) and Carpenter (2002). All measurements used in this paper (Table 1) were taken to the nearest 0.01 mm as in Lourie et al. (1999) for seahorses preserved specimens. To get around the difficulty of measuring the curvature of the trunk and tail of the seahorse, the software Scion Image Beta 4.02 (www.scioncorp.com) was used to capture, display and measure the morphometric data via a graphical interface.

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The fish was a female with a total body mass of 5.1 g. Diagnostic features of the specimen are: 11 trunk rings, 33 tail rings, 3 rings supporting dorsal fin (2 trunk rings and 1 tail ring). Dorsal and pectoral fin with 17 and 16 rays, respectively. In the fresh fish the body was profusely spotted with brown dots and numerous tiny white dots.

Figure 2. *Hippocampus reidi* (MPEG 11244) captured in the mangrove estuary of Curuçá River, Pará, North Brazil.

Table 1. Measurements of sixteen morphometric characters of *Hippocampus reidi* from the Curuçá estuary, Pará, Northeast Brazil.

Characters	mm
Standard length	123.2
Trunk length	34.37
Tail length	62.42
Coronet height	6.7
Head length	26.41
Snout length	11.72
Snout depth	3.43
Orbital diameter	3.98
Post-orbital length	10.31
Head depth	11.8
Trunk depth between 4th and 5th trunk rings	9.12
Trunk depth between 9th and 10th trunk rings	12.47
Trunk width between 9th and 10th trunk rings	7.42
Distance between the 9th trunk ring lateral ridge spine tips	1.24
Pectoral fin length	4.61
Dorsal fin length	9.84

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